

Actuarial Valuation Data by Year

St. Paul Teachers Retirement Fund Association

(SPTRFA)

	FY2018	FY2017	FY2016	FY2015	FY2014	FY2013	FY2012
Membership							
Active Members	3,577	3,550	3,534	3,756	3,959	4,061	3,880
Service Retirees	3,547	3,478	3,363	3,277	3,156	3,047	2,942
Disabilitants	25	30	32	33	34	30	29
Survivors	342	343	328	323	339	327	321
Deferred Retirees	2,031	2,034	2,020	1,892	1,829	1,788	1,833
Nonvested Former Members	3,014	2,945	2,915	1,981	1,616	1,435	1,427
Total Membership	12,536	12,380	12,192	11,262	10,933	10,688	10,432
Funded Status							
Accrued Liability	\$1,676,193,000	\$1,611,208,000	\$1,592,570,000	\$1,596,770,000	\$1,533,603,000	\$1,467,350,000	\$1,471,216,000
Current Assets	<u>\$1,067,675,000</u>	<u>\$1,038,467,000</u>	<u>\$1,007,360,000</u>	<u>\$999,736,000</u>	<u>\$947,972,000</u>	<u>\$886,296,000</u>	<u>\$911,930,000</u>
Unfunded Accrued Liability	\$608,518,000	\$572,741,000	\$585,210,000	\$597,034,000	\$585,631,000	\$581,054,000	\$559,286,000
Funding Ratio	63.70%	64.45%	63.25%	62.61%	61.81%	60.40%	61.98%
Financing Requirements							
Covered Payroll	\$281,782,000	\$280,785,000	\$271,781,000	\$280,488,000	\$273,990,000	\$270,395,000	\$256,509,000
Benefits Payable	\$115,298,000	\$112,771,000	\$111,167,000	\$108,878,000	\$105,742,000	\$103,238,000	\$101,788,000
Normal Cost	8.26% \$23,279,000	8.93% \$25,087,000	8.87% \$24,098,000	9.13% \$25,596,000	8.51% \$23,323,000	7.83% \$21,168,000	8.39% \$21,503,000
Administrative Expenses	0.28% \$789,000	0.33% \$927,000	0.27% \$734,000	0.27% \$757,000	0.27% \$740,000	0.29% \$784,000	0.31% \$795,000
Amortiz. of Unfunded Liab.^	<u>13.00%</u> <u>\$36,632,000</u>	<u>12.90%</u> <u>\$36,221,000</u>	<u>13.30%</u> <u>\$36,147,000</u>	<u>12.86%</u> <u>\$36,071,000</u>	<u>13.15%</u> <u>\$36,030,000</u>	<u>14.01%</u> <u>\$37,882,000</u>	<u>14.17%</u> <u>\$36,347,000</u>
Total Requirements	21.54% \$60,700,000	22.16% \$62,235,000	22.44% \$60,979,000	22.26% \$62,424,000	21.94% \$60,093,000	22.13% \$59,834,000	22.87% \$58,645,000
Employee Contributions	7.50% \$21,138,000	7.50% \$21,069,000	7.50% \$20,393,000	7.00% \$19,648,000	6.51% \$17,827,000	6.27% \$16,947,000	6.02% \$15,449,000
Employer Contributions	7.34% \$20,688,000	6.50% \$18,265,000	6.25% \$16,999,000	9.85% \$27,618,000	9.35% \$25,613,000	9.11% \$24,641,000	8.87% \$22,753,000
Employer Add'l Cont.	3.84% \$10,820,000	3.84% \$10,782,000	3.84% \$10,436,000	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Direct State Funding	5.56% \$15,665,000	3.80% \$10,665,000	3.92% \$10,665,000	3.80% \$10,665,000	3.89% \$10,665,000	3.94% \$10,665,000	1.58% \$4,057,000
Other Govt. Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Administrative Assessment	<u>0.00%</u> <u>\$0</u>						
Total Contributions	24.23% \$68,311,000	21.64% \$60,781,000	21.52% \$58,493,000	20.65% \$57,931,000	19.75% \$54,105,000	19.33% \$52,253,000	16.47% \$42,259,000
Total Requirements	21.54% \$60,700,000	22.16% \$62,235,000	22.44% \$60,979,000	22.26% \$62,424,000	21.94% \$60,093,000	22.13% \$59,834,000	22.87% \$58,645,000
Total Contributions	<u>24.23%</u> <u>\$68,311,000</u>	<u>21.64%</u> <u>\$60,781,000</u>	<u>21.52%</u> <u>\$58,493,000</u>	<u>20.65%</u> <u>\$57,931,000</u>	<u>19.75%</u> <u>\$54,105,000</u>	<u>19.33%</u> <u>\$52,253,000</u>	<u>16.47%</u> <u>\$42,259,000</u>
Sufficiency/(Deficiency)	2.69% \$7,611,000	(0.52%) (\$1,454,000)	(0.91%) (\$2,486,000)	(1.60%) (\$4,493,000)	(2.19%) (\$5,988,000)	(2.80%) (\$7,581,000)	(6.40%) (\$16,386,000)
Amortization Target Date	2048		2042	2042	2042	2038	2037
Actuary	GRS						

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date. The information set forth in this report is a compilation of data taken from actuarial valuation reports prepared by each plan's actuary. The LCPR or its staff do not warrant or guarantee its accuracy, reliability or completeness. LCPR staff compiles this information to provide a single source for similar data on the plans, for the sake of convenience and ease of comparison, for use by Minnesota legislators and, secondarily, the public. This information should not be relied on for any "official" purpose. Please refer to the plans' actuarial valuation reports, available on the LCPR website at www.lcpr.leg.mn, for the most accurate, complete and detailed information.

Actuarial Valuation Data by Year

St. Paul Teachers Retirement Fund Association

(SPTRFA)

	FY2011	FY2010	FY2009	FY2008	FY2007	FY2006	2005
Membership							
Active Members	3,578	3,837	3,962	4,142	3,999	4,219	4,355
Service Retirees	2,864	2,721	2,593	2,514	2,413	2,302	2,208
Disabilitants	29	23	25	26	24	25	32
Survivors	319	300	293	290	284	280	259
Deferred Retirees	1,880	1,863	1,823	1,695	1,693	1,447	1,368
Nonvested Former Members	<u>1,698</u>	<u>1,419</u>	<u>1,451</u>	<u>1,403</u>	<u>1,538</u>	<u>1,671</u>	<u>1,687</u>
Total Membership	10,368	10,163	10,147	10,070	9,951	9,944	9,909
Funded Status							
Accrued Liability	\$1,389,875,000	\$1,471,630,000	\$1,454,314,000	\$1,432,040,000	\$1,391,297,918	\$1,358,619,906	\$1,299,831,584
Current Assets	<u>\$972,718,000</u>	<u>\$1,001,444,000</u>	<u>\$1,049,954,000</u>	<u>\$1,075,951,000</u>	<u>\$1,015,722,034</u>	<u>\$938,919,005</u>	<u>\$905,292,514</u>
Unfunded Accrued Liability	\$417,157,000	\$470,186,000	\$404,360,000	\$356,089,000	\$375,575,884	\$419,700,901	\$394,539,070
Funding Ratio	69.99%	68.05%	72.20%	75.13%	73.01%	69.11%	69.65%
Financing Requirements							
Covered Payroll	\$239,501,000	\$250,225,000	\$252,726,000	\$247,291,000	\$233,099,133	\$234,213,344	\$227,818,794
Benefits Payable	\$97,287,000	\$95,300,000	\$95,137,000	\$88,272,000	\$82,809,201	\$78,420,222	\$72,438,204
Normal Cost	7.59% \$18,165,000	8.28% \$20,735,000	8.52% \$21,558,000	8.66% \$21,396,000	9.05% \$21,099,816	9.21% \$21,575,645	9.23% \$21,035,503
Administrative Expenses	0.29% \$694,000	0.24% \$601,000	0.24% \$607,000	0.29% \$717,000	0.30% \$699,297	0.26% \$608,955	0.24% \$546,765
Amortiz. of Unfunded Liab.^	<u>10.49%</u> <u>\$25,124,000</u>	<u>11.32%</u> <u>\$28,325,000</u>	<u>9.64%</u> <u>\$24,363,000</u>	<u>8.68%</u> <u>\$21,465,000</u>	<u>14.75%</u> <u>\$34,382,122</u>	<u>15.55%</u> <u>\$36,420,175</u>	<u>14.30%</u> <u>\$32,578,088</u>
Total Requirements	18.37% \$43,983,000	19.84% \$49,661,000	18.40% \$46,528,000	17.63% \$43,578,000	24.10% \$56,181,235	25.02% \$58,604,775	23.77% \$54,160,356
Employee Contributions	5.78% \$13,838,000	5.56% \$13,917,000	5.58% \$14,108,000	5.61% \$13,864,000	5.64% \$13,139,595	5.69% \$13,319,540	5.73% \$13,059,350
Employer Contributions	8.63% \$20,661,000	8.42% \$21,072,000	8.45% \$21,351,000	8.48% \$20,972,000	8.52% \$19,861,736	8.59% \$20,111,296	8.65% \$19,698,785
Employer Add'l Cont.	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Direct State Funding	1.69% \$4,057,000	1.62% \$4,057,000	1.61% \$4,057,000	1.64% \$4,057,000	1.91% \$4,451,216	2.05% \$4,803,000	2.11% \$4,803,000
Other Govt. Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Administrative Assessment	<u>0.00%</u> <u>\$0</u>						
Total Contributions	16.10% \$38,556,000	15.60% \$39,046,000	15.64% \$39,516,000	15.73% \$38,893,000	16.07% \$37,452,547	16.32% \$38,233,836	16.49% \$37,561,135
Total Requirements	18.37% \$43,983,000	19.84% \$49,661,000	18.40% \$46,528,000	17.63% \$43,578,000	24.10% \$56,181,235	25.02% \$58,604,775	23.77% \$54,160,356
Total Contributions	<u>16.10%</u> <u>\$38,556,000</u>	<u>15.60%</u> <u>\$39,046,000</u>	<u>15.64%</u> <u>\$39,516,000</u>	<u>15.73%</u> <u>\$38,893,000</u>	<u>16.07%</u> <u>\$37,452,547</u>	<u>16.32%</u> <u>\$38,233,836</u>	<u>16.49%</u> <u>\$37,561,135</u>
Sufficiency/(Deficiency)	(2.27%) (\$5,427,000)	(4.24%) (\$10,615,000)	(2.76%) (\$7,012,000)	(1.90%) (\$4,685,000)	(8.03%) (\$18,728,688)	(8.70%) (\$20,370,939)	(7.29%) (\$16,599,221)
Amortization Target Date	2036	2035	2034	2033	2021	2021	2021
Actuary	GRS	GRS	GRS	GRS	Segal	Segal	Segal

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.

Actuarial Valuation Data by Year

St. Paul Teachers Retirement Fund Association

(SPTRFA)

	2004	2003	2002	2001	2000	1999	1998
Membership							
Active Members	4,441	4,331	4,306	4,671	4,445	4,378	4,494
Service Retirees	2,078	1,988	1,884	1,807	1,728	1,637	1,571
Disabilitants	28	21	24	23	23	24	24
Survivors	249	239	228	220	213	199	194
Deferred Retirees	1,261	858	815	324	243	220	183
Nonvested Former Members	1,664	1,966	2,078	1,671	1,697	1,108	839
Total Membership	9,721	9,403	9,335	8,716	8,349	7,566	7,305
Funded Status							
Accrued Liability	\$1,251,460,084	\$1,189,361,000	\$1,141,300,000	\$1,060,931,000	\$998,253,000	\$938,847,000	\$861,584,000
Current Assets	<u>\$898,859,732</u>	<u>\$898,760,000</u>	<u>\$899,572,000</u>	<u>\$869,045,000</u>	<u>\$801,823,000</u>	<u>\$704,233,000</u>	<u>\$625,053,000</u>
Unfunded Accrued Liability	\$352,600,352	\$290,601,000	\$241,728,000	\$191,886,000	\$196,430,000	\$234,614,000	\$236,531,000
Funding Ratio	71.82%	75.57%	78.82%	81.91%	80.32%	75.01%	72.55%
Financing Requirements							
Covered Payroll	\$230,777,730	\$218,898,000	\$214,594,000	\$214,775,000	\$198,974,000	\$188,717,000	\$178,365,000
Benefits Payable	\$67,941,921	\$63,358,000	\$58,739,000	\$53,325,000	\$47,168,000	\$41,725,000	\$37,852,000
Normal Cost	9.31% \$21,479,177	10.09% \$22,076,000	10.16% \$21,804,000	9.05% \$19,447,000	9.35% \$18,628,000	9.37% \$17,692,000	9.83% \$17,528,000
Administrative Expenses	0.24% \$553,867	0.23% \$503,000	0.21% \$451,000	0.22% \$466,000	0.24% \$469,000	0.23% \$438,000	0.23% \$414,000
Amortiz. of Unfunded Liab.^	<u>12.05%</u> <u>\$27,808,716</u>	<u>10.04%</u> <u>\$21,977,000</u>	<u>8.19%</u> <u>\$17,575,000</u>	<u>6.54%</u> <u>\$14,056,000</u>	<u>6.98%</u> <u>\$13,880,000</u>	<u>8.49%</u> <u>\$16,020,000</u>	<u>8.76%</u> <u>\$15,626,000</u>
Total Requirements	21.60% \$49,841,760	20.35% \$44,556,000	18.56% \$39,830,000	15.81% \$33,969,000	16.57% \$32,977,000	18.09% \$34,150,000	18.82% \$33,568,000
Employee Contributions	5.80% \$13,393,204	5.87% \$12,846,000	5.92% \$12,709,000	5.97% \$12,831,000	6.05% \$12,036,000	6.12% \$11,557,000	6.20% \$11,057,000
Employer Contributions	8.74% \$20,171,429	8.83% \$19,321,000	8.90% \$19,093,000	8.97% \$19,256,000	9.07% \$18,037,000	9.16% \$17,294,000	9.26% \$16,522,000
Employer Add'l Cont.	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Direct State Funding	2.08% \$4,803,000	2.19% \$4,803,000	2.24% \$4,803,000	2.13% \$4,577,000	2.17% \$4,317,000	2.24% \$4,227,000	2.12% \$3,794,000
Other Govt. Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Administrative Assessment	<u>0.00%</u> <u>\$0</u>	<u>0.01%</u> <u>\$18,000</u>					
Total Contributions	16.63% \$38,367,633	16.90% \$36,970,000	17.06% \$36,605,000	17.07% \$36,664,000	17.29% \$34,390,000	17.52% \$33,078,000	17.59% \$31,391,000
Total Requirements	21.60% \$49,841,760	20.35% \$44,556,000	18.56% \$39,830,000	15.81% \$33,969,000	16.57% \$32,977,000	18.09% \$34,150,000	18.82% \$33,568,000
Total Contributions	<u>16.63%</u> <u>\$38,367,633</u>	<u>16.90%</u> <u>\$36,970,000</u>	<u>17.06%</u> <u>\$36,605,000</u>	<u>17.07%</u> <u>\$36,664,000</u>	<u>17.29%</u> <u>\$34,390,000</u>	<u>17.52%</u> <u>\$33,078,000</u>	<u>17.59%</u> <u>\$31,391,000</u>
Sufficiency/(Deficiency)	(4.97%) (\$11,474,127)	(3.45%) (\$7,586,000)	(1.50%) (\$3,225,000)	1.26% \$2,695,000	0.72% \$1,413,000	(0.57%) (\$1,072,000)	(1.23%) (\$2,177,000)
Amortization Target Date	2021	2021	2021	2020	2020	2020	2020
Actuary	Segal	Milliman USA	Milliman USA	Milliman USA	Milliman & Robertson	Milliman & Robertson	Milliman & Robertson

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.

Actuarial Valuation Data by Year

St. Paul Teachers Retirement Fund Association

(SPTRFA)

	1997	1996	1995	1994	1993	1992	1991
Membership							
Active Members	3,842	3,805	3,742	3,560	3,441	3,336	3,299
Service Retirees	1,518	1,395	1,334	1,277	1,244	1,176	1,136
Disabilitants	22	22	35	32	36	33	29
Survivors	180	178	170	162	154	148	144
Deferred Retirees	148	136	107	97	89	60	67
Nonvested Former Members	783	1,011	1,066	1,054	889	931	935
Total Membership	6,493	6,547	6,454	6,182	5,853	5,684	5,610
Funded Status							
Accrued Liability	\$757,589,000	\$664,072,000	\$633,070,000	\$596,441,000	\$571,059,000	\$533,865,000	\$495,740,000
Current Assets	<u>\$556,406,000</u>	<u>\$494,931,000</u>	<u>\$445,733,000</u>	<u>\$407,275,000</u>	<u>\$393,168,000</u>	<u>\$355,998,000</u>	<u>\$326,357,000</u>
Unfunded Accrued Liability	\$201,183,000	\$169,141,000	\$187,337,000	\$189,166,000	\$177,891,000	\$177,867,000	\$169,383,000
Funding Ratio	73.44%	74.53%	70.41%	68.28%	68.85%	66.68%	65.83%
Financing Requirements							
Covered Payroll	\$160,200,000	\$155,146,000	\$148,221,000	\$137,713,000	\$130,921,000	\$122,767,000	\$117,291,000
Benefits Payable	\$27,109,000	\$29,925,000	\$26,793,000	\$24,866,000	\$22,764,000	\$24,083,000	\$18,812,000
Normal Cost	10.12% \$16,216,000	10.91% \$16,923,000	11.15% \$16,532,000	11.48% \$15,805,000	11.78% \$15,419,000	12.11% \$14,869,000	11.60% \$13,607,000
Administrative Expenses	0.27% \$426,000	0.23% \$357,000	0.26% \$385,000	0.25% \$344,000	0.27% \$353,000	0.75% \$921,000	0.60% \$704,000
Amortiz. of Unfunded Liab.^	<u>8.06%</u> <u>\$12,905,000</u>	<u>5.83%</u> <u>\$9,045,000</u>	<u>6.55%</u> <u>\$9,708,000</u>	<u>6.90%</u> <u>\$9,502,000</u>	<u>6.63%</u> <u>\$8,680,000</u>	<u>6.88%</u> <u>\$8,446,000</u>	<u>6.67%</u> <u>\$7,823,000</u>
Total Requirements	18.45% \$29,547,000	16.97% \$26,325,000	17.96% \$26,625,000	18.63% \$25,651,000	18.68% \$24,452,000	19.74% \$24,236,000	18.87% \$22,134,000
Employee Contributions	6.30% \$10,091,000	5.79% \$8,979,000	5.90% \$8,748,000	6.05% \$8,335,000	6.19% \$8,101,000	6.33% \$7,776,000	6.44% \$7,553,000
Employer Contributions	9.40% \$15,051,000	9.43% \$14,625,000	9.54% \$14,144,000	8.94% \$12,314,000	8.68% \$11,363,000	8.76% \$10,755,000	9.00% \$10,562,000
Employer Add'l Cont.	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Direct State Funding	3.46% \$5,552,000	0.62% \$964,000	0.34% \$500,000	0.36% \$500,000	0.38% \$500,000	0.00% 0	0.00% 0
Other Govt. Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% 0	0.00% 0
Administrative Assessment	<u>0.08%</u> <u>\$128,000</u>	<u>0.07%</u> <u>\$109,000</u>	<u>0.09%</u> <u>\$133,000</u>	<u>0.10%</u> <u>\$138,000</u>	<u>0.12%</u> <u>\$163,000</u>	<u>0.00%</u> <u>0</u>	<u>0.00%</u> <u>0</u>
Total Contributions	19.24% \$30,822,000	15.91% \$24,677,000	15.87% \$23,525,000	15.45% \$21,287,000	15.37% \$20,127,000	15.09% \$18,531,000	15.44% \$18,115,000
Total Requirements	18.45% \$29,547,000	16.97% \$26,325,000	17.96% \$26,625,000	18.63% \$25,651,000	18.68% \$24,452,000	19.74% \$24,236,000	18.87% \$22,134,000
Total Contributions	<u>19.24%</u> <u>\$30,822,000</u>	<u>15.91%</u> <u>\$24,677,000</u>	<u>15.87%</u> <u>\$23,525,000</u>	<u>15.45%</u> <u>\$21,287,000</u>	<u>15.37%</u> <u>\$20,127,000</u>	<u>15.09%</u> <u>\$18,531,000</u>	<u>15.44%</u> <u>\$18,115,000</u>
Sufficiency/(Deficiency)	0.79% \$1,275,000	(1.06%) (\$1,648,000)	(2.09%) (\$3,100,000)	(3.18%) (\$4,364,000)	(3.31%) (\$4,325,000)	(4.65%) (\$5,705,000)	(3.43%) (\$4,019,000)
Amortization Target Date	2020	2020	2020	2020	2020	2020	2020
Actuary	Milliman & Robertson						

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.

Actuarial Valuation Data by Year

St. Paul Teachers Retirement Fund Association

(SPTRFA)

	1990	1989	1988	1987	1986	1985	1984							
Membership														
Active Members	3,343	3,312	3,280	3,264	3,105	2,888	2,426							
Service Retirees	1,111	1,080	1,064	1,050	991	963	955							
Disabilitants	30	30	30	31	34	28	--							
Survivors	129	126	116	110	112	112	105							
Deferred Retirees	36	36	36	39	30	36	35							
Nonvested Former Members	888	1,186	1,056	1,955	1,852	1,770	--							
Total Membership	5,537	5,770	5,582	6,449	6,124	5,797	3,521							
Funded Status														
Accrued Liability	\$466,137,000	\$434,587,000	\$392,351,000	\$371,278,000	\$337,777,000	\$307,407,000	\$260,108,986							
Current Assets	<u>\$296,819,000</u>	<u>\$260,402,000</u>	<u>\$236,183,000</u>	<u>\$227,563,000</u>	<u>\$193,015,000</u>	<u>\$159,874,000</u>	<u>\$143,600,437</u>							
Unfunded Accrued Liability	\$169,318,000	\$174,185,000	\$156,168,000	\$143,715,000	\$144,762,000	\$147,533,000	\$116,508,549							
Funding Ratio	63.68%	59.92%	60.20%	61.29%	57.14%	52.01%	55.21%							
Financing Requirements														
Covered Payroll	\$109,881,000	\$102,290,000	\$95,390,000	\$90,392,000	\$84,932,000	\$75,852,000	\$75,982,828							
Benefits Payable	\$17,382,000	\$15,506,000	\$14,691,000	\$12,479,000	\$11,267,000	\$5,325,000	\$9,464,194							
Normal Cost	11.40%	\$12,527,000	11.71%	\$11,979,000	11.36%	\$10,832,000	11.56%	\$10,447,000	11.42%	\$9,696,000	11.74%	\$8,907,000	8.74%	\$6,641,507
Administrative Expenses	0.52%	\$571,000	0.55%	\$563,000	0.53%	\$506,000	0.46%	\$416,000	0.38%	\$323,000	0.34%	\$258,000	0.34%	\$255,095
Amortiz. of Unfunded Liab.^	<u>6.94%</u>	<u>\$7,626,000</u>	<u>7.49%</u>	<u>\$7,662,000</u>	<u>8.95%</u>	<u>\$8,537,000</u>	<u>8.37%</u>	<u>\$7,566,000</u>	<u>8.97%</u>	<u>\$7,621,000</u>	<u>9.87%</u>	<u>\$7,486,000</u>	<u>7.51%</u>	<u>\$5,703,423</u>
Total Requirements	18.86%	\$20,724,000	19.75%	\$20,204,000	20.84%	\$19,875,000	20.39%	\$18,429,000	20.77%	\$17,640,000	21.95%	\$16,651,000	16.58%	\$12,600,025
Employee Contributions	6.50%	\$7,139,000	6.60%	\$6,754,000	6.71%	\$6,401,000	6.83%	\$6,173,000	6.96%	\$5,913,000	7.12%	\$5,402,000	7.05%	\$5,355,042
Employer Contributions	9.14%	\$10,042,000	9.38%	\$9,599,000	9.63%	\$9,190,000	9.91%	\$8,958,000	10.22%	\$8,679,000	10.59%	\$8,032,000	10.42%	\$7,915,891
Employer Add'l Cont.	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0
Direct State Funding	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
Other Govt. Funding	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
Administrative Assessment	<u>0.00%</u>	<u>0</u>	<u>0.00%</u>	<u>0</u>	<u>0.00%</u>	<u>0</u>	<u>0.00%</u>	<u>0</u>	<u>0.00%</u>	<u>0</u>	<u>0.00%</u>	<u>0</u>	<u>0.00%</u>	<u>0</u>
Total Contributions	15.64%	\$17,181,000	15.98%	\$16,353,000	16.34%	\$15,591,000	16.74%	\$15,131,000	17.18%	\$14,592,000	17.71%	\$13,434,000	17.47%	\$13,270,933
Total Requirements	18.86%	\$20,724,000	19.75%	\$20,204,000	20.84%	\$19,875,000	20.39%	\$18,429,000	20.77%	\$17,640,000	21.95%	\$16,651,000	16.58%	\$12,600,025
Total Contributions	<u>15.64%</u>	<u>\$17,181,000</u>	<u>15.98%</u>	<u>\$16,353,000</u>	<u>16.34%</u>	<u>\$15,591,000</u>	<u>16.74%</u>	<u>\$15,131,000</u>	<u>17.18%</u>	<u>\$14,592,000</u>	<u>17.71%</u>	<u>\$13,434,000</u>	<u>17.47%</u>	<u>\$13,270,933</u>
Sufficiency/(Deficiency)	(3.22%)	(\$3,543,000)	(3.77%)	(\$3,851,000)	(4.50%)	(\$4,284,000)	(3.65%)	(\$3,298,000)	(3.59%)	(\$3,048,000)	(4.24%)	(\$3,217,000)	0.88%	\$670,908
Amortization Target Date	2020	2020	2010	2010	2009	2009	2009							
Actuary	Wyatt	Wyatt	Wyatt	Wyatt	Wyatt	Wyatt	Touche Ross							

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.

Actuarial Valuation Data by Year

St. Paul Teachers Retirement Fund Association

(SPTRFA)

	1983	1982	1981	1980	1979	1978	1977
Membership							
Active Members	2,384	2,331	2,800	2,842	2,480	2,792	2,685
Service Retirees	944	899	855	845	840	841	832
Disabilitants	--	--	35	35	34	33	25
Survivors	98	97	91	83	72	72	62
Deferred Retirees	--	--	--	--	--	--	--
Nonvested Former Members	--	--	--	--	--	--	--
Total Membership	3,426	3,327	3,781	3,805	3,426	3,738	3,604
Funded Status							
Accrued Liability	\$286,416,780	\$256,467,020	\$232,389,470	\$213,459,450	\$195,587,885	\$178,246,953	\$153,000,503
Current Assets	<u>\$132,517,578</u>	<u>\$117,983,021</u>	<u>\$105,071,870</u>	<u>\$91,317,183</u>	<u>\$79,622,860</u>	<u>\$70,023,919</u>	<u>\$61,492,282</u>
Unfunded Accrued Liability	\$153,899,202	\$138,483,999	\$127,317,600	\$122,142,267	\$115,965,025	\$108,223,034	\$91,508,221
Funding Ratio	46.27%	46.00%	45.21%	42.78%	40.71%	39.28%	40.19%
Financing Requirements							
Covered Payroll	\$66,289,124	\$61,695,167	\$60,342,802	\$58,224,248	\$54,802,584	\$53,370,977	\$44,909,545
Benefits Payable	\$8,553,707	\$7,720,713	\$6,836,976	\$6,441,640	\$5,992,985	\$5,726,949	\$5,265,788
Normal Cost	9.91% \$6,566,932	10.36% \$6,394,642	11.59% \$6,993,912	11.83% \$6,887,929	12.08% \$6,621,084	12.19% \$6,504,801	12.41% \$5,575,116
Administrative Expenses	0.38% \$249,834	0.36% \$222,035	0.32% \$194,301	0.33% \$190,393	0.34% \$186,000	0.31% \$164,543	0.32% \$144,339
Amortiz. of Unfunded Liab.^	<u>16.15%</u> <u>\$10,705,892</u>	<u>15.33%</u> <u>\$9,457,314</u>	<u>14.16%</u> <u>\$8,544,541</u>	<u>13.86%</u> <u>\$8,066,970</u>	<u>13.77%</u> <u>\$7,543,685</u>	<u>16.78%</u> <u>\$8,954,903</u>	<u>16.35%</u> <u>\$7,342,845</u>
Total Requirements	26.43% \$17,522,659	26.05% \$16,073,991	26.07% \$15,732,754	26.01% \$15,145,291	26.19% \$14,350,769	29.27% \$15,624,247	29.09% \$13,062,300
Employee Contributions	7.19% \$4,763,669	7.37% \$4,544,343	7.38% \$4,453,299	7.42% \$4,322,452	7.52% \$4,121,100	7.63% \$4,074,340	8.00% \$3,592,764
Employer Contributions	10.74% \$7,119,319	11.16% \$6,883,206	11.19% \$6,752,360	11.29% \$6,574,391	11.51% \$6,310,463	12.63% \$6,740,754	11.55% \$5,187,636
Employer Add'l Cont.	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Direct State Funding	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0
Other Govt. Funding	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0
Administrative Assessment	<u>0.00%</u> <u>0</u>	<u>0.00%</u> <u>0</u>					
Total Contributions	17.93% \$11,882,988	18.52% \$11,427,549	18.57% \$11,205,658	18.72% \$10,896,843	19.03% \$10,431,562	20.26% \$10,815,095	19.55% \$8,780,400
Total Requirements	26.43% \$17,522,659	26.05% \$16,073,991	26.07% \$15,732,754	26.01% \$15,145,291	26.19% \$14,350,769	29.27% \$15,624,247	29.09% \$13,062,300
Total Contributions	<u>17.93%</u> <u>\$11,882,988</u>	<u>18.52%</u> <u>\$11,427,549</u>	<u>18.57%</u> <u>\$11,205,658</u>	<u>18.72%</u> <u>\$10,896,843</u>	<u>19.03%</u> <u>\$10,431,562</u>	<u>20.26%</u> <u>\$10,815,095</u>	<u>19.55%</u> <u>\$8,780,400</u>
Sufficiency/(Deficiency)	(8.51%) (\$5,639,670)	(7.53%) (\$4,646,442)	(7.50%) (\$4,527,096)	(7.30%) (\$4,248,449)	(7.15%) (\$3,919,207)	(9.01%) (\$4,809,152)	(9.53%) (\$4,281,901)
Amortization Target Date	2009	2009	2009	2009	2009	1997	1997
Actuary	Touche Ross	Touche Ross	Compensation & Capital	Compensation & Capital	Compensation & Capital	Compensation & Capital	Compensation & Capital

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.

Actuarial Valuation Data by Year

St. Paul Teachers Retirement Fund Association

(SPTRFA)

	1976	1975	1974	1973	1972	1971	1970
Membership							
Active Members	2,612	2,822	2,869	2,897	3,017	2,941	2,743
Service Retirees	801	759	740	730	734	727	705
Disabilitants	23	19	14	14	11	12	12
Survivors	59	48	44	43	37	30	23
Deferred Retirees	--	--	--	--	--	--	--
Nonvested Former Members	--	--	--	--	--	--	--
Total Membership	3,495	3,648	3,667	3,684	3,799	3,710	3,483
Funded Status							
Accrued Liability	\$135,966,213	\$121,897,799	\$112,636,381	\$96,577,497	\$118,885,613	\$118,809,540	\$107,609,574
Current Assets	<u>\$54,480,417</u>	<u>\$46,833,545</u>	<u>\$40,763,219</u>	<u>\$33,004,303</u>	<u>\$27,554,138</u>	<u>\$22,541,277</u>	<u>\$17,162,614</u>
Unfunded Accrued Liability	\$81,485,796	\$75,064,254	\$71,873,162	\$63,573,194	\$91,331,475	\$96,268,263	\$90,446,960
Funding Ratio	40.07%	38.42%	36.19%	34.17%	23.18%	18.97%	15.95%
Financing Requirements							
Covered Payroll	\$44,783,565	\$42,262,561	\$41,808,570	\$37,983,849	\$35,030,594	\$35,291,273	\$30,997,190
Benefits Payable	\$4,783,211	\$4,007,753	\$3,578,993	\$3,261,550	\$2,681,828	\$2,659,927	\$2,420,235
Normal Cost	11.00% \$4,927,670	10.99% \$4,644,825	11.19% \$4,678,379	9.20% \$3,494,514	13.58% \$4,757,155	13.28% \$4,686,681	12.90% \$3,998,638
Administrative Expenses	0.29% \$129,738	0.26% \$111,362	0.24% \$100,341	0.27% \$102,556	0.25% \$87,576	0.23% \$81,170	0.23% \$71,294
Amortiz. of Unfunded Liab.^	<u>14.19%</u> <u>\$6,355,594</u>	<u>13.49%</u> <u>\$5,702,656</u>	<u>12.74%</u> <u>\$5,326,412</u>	<u>12.15%</u> <u>\$4,615,038</u>	<u>15.82%</u> <u>\$5,541,840</u>	<u>16.15%</u> <u>\$5,699,541</u>	<u>16.88%</u> <u>\$5,232,326</u>
Total Requirements	25.48% \$11,413,002	24.75% \$10,458,843	24.17% \$10,105,131	21.62% \$8,212,108	29.65% \$10,386,571	29.66% \$10,467,392	30.01% \$9,302,257
Employee Contributions	8.00% \$3,582,685	8.00% \$3,381,005	8.00% \$3,344,686	7.00% \$2,658,869	7.00% \$2,452,142	7.00% \$2,470,389	7.00% \$2,169,803
Employer Contributions	11.45% \$5,127,091	11.34% \$4,794,011	13.50% \$5,644,157	12.00% \$4,558,062	11.00% \$3,853,365	11.00% \$3,882,040	11.00% \$3,409,691
Employer Add'l Cont.	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Direct State Funding	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0
Other Govt. Funding	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0
Administrative Assessment	<u>0.00%</u> <u>0</u>						
Total Contributions	19.45% \$8,709,776	19.34% \$8,175,016	21.50% \$8,988,843	19.00% \$7,216,931	18.00% \$6,305,507	18.00% \$6,352,429	18.00% \$5,579,494
Total Requirements	25.48% \$11,413,002	24.75% \$10,458,843	24.17% \$10,105,131	21.62% \$8,212,108	29.65% \$10,386,571	29.66% \$10,467,392	30.01% \$9,302,257
Total Contributions	<u>19.45%</u> <u>\$8,709,776</u>	<u>19.34%</u> <u>\$8,175,016</u>	<u>21.50%</u> <u>\$8,988,843</u>	<u>19.00%</u> <u>\$7,216,931</u>	<u>18.00%</u> <u>\$6,305,507</u>	<u>18.00%</u> <u>\$6,352,429</u>	<u>18.00%</u> <u>\$5,579,494</u>
Sufficiency/(Deficiency)	(6.04%) (\$2,703,226)	(5.40%) (\$2,283,827)	(2.67%) (\$1,116,289)	(2.62%) (\$995,177)	(11.65%) (\$4,081,064)	(11.66%) (\$4,114,962)	(12.01%) (\$3,722,763)
Amortization Target Date	1997	1997	1997	1997	1997	1997	1997
Actuary	Compensation & Capital	Compensation & Capital	A.S. Hansen				

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.

Actuarial Valuation Data by Year

St. Paul Teachers Retirement Fund Association

(SPTRFA)

	1969		1958	
<u>Membership</u>				
Active Members		2,579		1,705
Service Retirees		720		560
Disabilitants		11		--
Survivors		20		--
Deferred Retirees		--		1
Nonvested Former Members		--		--
Total Membership		3,330		2,266
<u>Funded Status</u>				
Accrued Liability		\$96,292,296		\$25,190,245
Current Assets		<u>\$14,098,237</u>		<u>\$2,252,483</u>
Unfunded Accrued Liability		\$82,194,059		\$22,937,762
Funding Ratio	14.64%		8.94%	
<u>Financing Requirements</u>				
Covered Payroll		\$26,420,399		\$9,957,553
Benefits Payable		\$2,363,164		\$990,018
Normal Cost	12.49%	\$3,299,908	14.00%	\$1,394,057
Administrative Expenses	0.23%	\$60,767	0.00%	\$0
Amortiz. of Unfunded Liab.^	<u>17.61%</u>	<u>\$4,652,632</u>	<u>10.10%</u>	<u>\$1,005,713</u>
Total Requirements	30.33%	\$8,013,307	24.10%	\$2,399,770
Employee Contributions	7.00%	\$1,849,428	5.00%	\$497,878
Employer Contributions	10.00%	\$2,642,040	8.00%	\$796,604
Employer Add'l Cont.	0.00%	\$0	0.00%	\$0
Direct State Funding	0.00%	0	0.00%	0
Other Govt. Funding	0.00%	0	0.00%	0
Administrative Assessment	<u>0.00%</u>	<u>0</u>	<u>0.00%</u>	<u>0</u>
Total Contributions	17.00%	\$4,491,468	13.00%	\$1,294,482
Total Requirements	30.33%	\$8,013,307	24.10%	\$2,399,770
Total Contributions	<u>17.00%</u>	<u>\$4,491,468</u>	<u>13.00%</u>	<u>\$1,294,482</u>
Sufficiency/(Deficiency)	(13.33%)	(\$3,521,839)	(11.10%)	(\$1,105,288)
Amortization Target Date	1997		1997	
Actuary	A.S. Hansen		A.A. Weinberg	

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.